#### **VAPOURSCREEN WB**

Issue Date: 25 November 2021



#### GENERAL PURPOSE METHOD STATEMENT

### 1. LABOUR:

Application of Resin Coatings is a skilled operation and should only be carried out by experienced and competent installers. Application by unskilled labour is not recommended and may result in an installation failure.

## 2. TOOLS & EQUIPMENT REQUIRED:

- Diamond Grinder, Captive Sandblaster or similar surface preparation equipment
- · Broom & Heavy Duty Vacuum Cleaner
- · Slow speed drill (350 rpm)
- · Approved mixing paddle attachment
- · Short pile Mohair roller
- · Straight edge steel trowel or Spring steel squeegee
- Rubber Squeegee
- MVER Test Kits
- Rapid RH Test Kits

## 3. MOISTURE TESTING & APPLICATION RATE:

Moisture testing, using an approved electronic moisture meter, should be carried out to determine the moisture content of the substrate, and the readings accurately recorded. The required application rate of **TAL Vapourscreen WB** can only be accurately determined by moisture testing.

If no moisture testing is carried out, or where there is no DPC below concrete surface beds, 2 coats of 300 micron Wet Film Thickness  $(3m^2/L)$  per coat should be applied. This application rate is usually sufficient to halt vapour emissions.

In this instance a test panel should be applied and monitored for a minimum of 96 hours. If no signs of delamination are evident after the monitoring period the application can proceed.

In extreme cases, Moisture Vapour Emission Rate (MVER) or Internal Relative Humidity (IHR) testing may be required. Please contact the TAL Technical Department in this regard.

\*NB : Actual coverages will be determine by substrate porosity, surface profile, workmanship, wastage, etc. Allow additional product (20 – 30%) for highly porous or textured surfaces.

#### 4. APPLICATION CONDITIONS & PROPERTIES:

Resin Coatings should not be applied at temperatures below 10°C or above 35°C.

For optimum product performance the floor and ambient temperatures should be around 20°C throughout the **TAL Vapourscreen WB** installation.

High ambient temperatures will considerably shorten the working time of the product, which could have an impact on the flooring system and may result in an imperfect finish.

Important: Cold ambient temperatures will considerably slow the setting time, and may even result in non-curing.

Do not apply if the temperature is within 3% of the dew point, or 5°C of the dew point and dropping. Maximum ambient relative humidity of 85%.

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#### Pot Life (Minutes):

10°C	20°C	30°C
90	60	30

#### **Recoat Times (Hours):**

10°C		20°C		30°C	
Min	Max	Min	Max	Min	Max
4	8	2	4	0.5	2

Exceeding the Maximum Recoating Time may result in debonding of the following layers. Application should be carried out as soon as possible to prevent contamination or damage from people walking over the surface, dust, dew, etc.

## 5. SURFACE PREPARATION:

Surface preparation is a vital aspect of any flooring application. Inadequate preparation may easily lead to loss of adhesion and ultimately failure of the flooring installation.

Any screeding or underlayment must be firmly bonded to the underlying concrete. The substrate must be of significant strength and must be integrally sound. Loose or unsound concrete should be removed and made good.

The substrate must be clean and dry and free from all traces of surface laitance and contamination such as dust, dirt, waxes, oils, bitumen, old adhesives, paint, grease, weak cement screeds, shutter release and curing agents, sealing compounds, etc.

Bituminous compounds must be removed completely. Organic or fungal growth must be removed and the spores killed using an effective fungicide.

The surface should be suitably prepared, by diamond grinding or captive sandblasting, to remove any curing agents, laitance or surface contaminants and to achieve a clean and lightly textured surface consistent with a CSP (Concrete Surface Profile) of 2-3 (Light).

Any cracks or bug holes (blow holes) should be filled with TAL BugFill after the application of TAL Vapourscreen WB.

The surface strength of the substrate should be sufficient to restrain any stresses which occur during the setting and hardening of the resin floor.

Substrates should have a minimum acceptable compressive strength of 20MPa and tensile strength of 1.5N/mm<sup>2</sup>.

### 6. MIXING:

Pre-mix both the Base and Hardener components to disperse any settlement.

Add all of the contents of the Base Component into the Hardener Component and mix using a slow speed drill (350 – 500rpm) with an approved mixing paddle attachment for 5 minutes, until both components are fully dispersed and the mix is uniform in colour and consistency. Be sure to rotate the mixer throughout the drum. **Mix only complete full packs**.

### 7. APPLICATION

The surface must be thoroughly swept to remove all traces of dust and loose particles, taking care to remove the dust rather than redistribute it. (Vacuuming is preferred.)

The application rate will be determined by the MVER / IHR testing stipulated in Item 3. above.

Two coats of TAL Vapourscreen WB must be applied, as follows:

- Smooth Surfaces Apply the first coat at the prescribed rate to the substrate using a short pile Mohair roller, and ensuring a uniform Wet Film Thickness across the surface.
  - **Alternatively**, pour the mixed product onto surface, spread with a straight edge steel trowel or spring steel squeegee, and then back-roll with short pile Mohair roller, ensuring a uniform Wet Film Thickness across the surface.
- Rough Surfaces Pour the mixed product onto surface, pull across the surface with a suitable rubber squeegee, and then back-roll with a short pile Mohair roller, ensuring a uniform Wet Film Thickness across the surface.

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The second coat must be applied in the same manner as the first coat within the stipulated Recoating Time, and in a cross-direction to the first coat to ensure no pinholes or gaps in the application.

Ensure that no ponding of the primer occurs and that it is not applied too thick. Failure to do so could result in prolonged curing times, and a compromised installation.

Where the vapour barrier product is to be overcoated with a cementitious underlayment, use *one* the following methods:

- Allow the drying time indicated in the Recoat Times section in Item 4. above, then apply one coat of TAL Primercoat (1k cementitious slurry primer) at a rate of 4 5m<sup>2</sup>/L using a short-pile lambswool roller, and ensuring complete coverage of the substrate.
  - Allow the TAL Primercoat application to dry (1-2 hours, depending on site and ambient conditions).
- <u>Immediately</u> after application of the second coat, broadcast **TAL Primer Aggregate (SQ2)** into the <u>wet</u> **TAL Vapourscreen WB** at a rate of no less than 2.4kg/1m² (**full blind**). The surface must be blinded completely with Aggregate to rejection, ie full (100%) coverage of Aggregate over the **TAL Vapourscreen WB**.

**Note:** It is critical that the **TAL Vapourscreen WB** is not applied so thick that the Aggregate particles become fully encapsulated by the Resin, as this will act as a 'bond breaker' and prevent the following layer from forming an adequate bond onto the substrate, resulting in delamination.

The surface must be left to dry for a minimum of 2 hours before any excess or loose Aggregate is removed by initially sweeping and then vacuuming.

# 8. APPLICATION RATE/COVERAGE

2 coats at circa 200 micron WFT (5m<sup>2</sup>/L) per coat.

Moisture testing, using an approved electronic moisture meter, should be carried out to determine the moisture content of the substrate, and the readings accurately recorded. The required application rate of **TAL Vapourscreen WB** can only be accurately determined by moisture testing.

NB: Actual coverages will be determined by substrate porosity, surface profile, workmanship, wastage, etc.

## 9. PACKAGING

2.5 Litre and 5 Litre Kits (plastic containers).

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## 10. CLEAN-UP:

Clean hands immediately after use with warm, soapy water or an industrial hand cleaner.

Clean tools and equipment immediately after use with warm, soapy water before the product dries.

Dry product on tools and equipment should be removed using TAL Resins Etching & Cleaning Fluid.

Dry product on the substrate should be removed using TAL Resins Etching & Cleaning Fluid.

#### 11. SHELF LIFE & STORAGE

Ensure lid is tightly sealed and packaging is secure and upright. Secure product when transporting to prevent accidental spillage.

When stored in original sealed packaging in dry internal conditions between 10°C and 30°C and out of direct sunlight the product has a shelf life of 6 months from date of manufacture. **Never store directly on a concrete floor.** 

## 12. LIMITATIONS:

Will not accommodate movement cracks.

Protect from UV.

Avoid excessive application.

Do not mix with any other material (eg chemicals, solvents, water, etc).

Do not apply in rain or wet conditions or at temperatures below 5°C.

Do not expose to running water or service conditions until the product is cured fully.

Avoid skin contact.

Do not discard into drains and sewage systems or into bodies of water (eg streams or dams).

#### 13. HEALTH & SAFETY:

This product is for use only by trained and competent installers. It is potentially hazardous if not used correctly. Please refer to the Material Safety Data Sheet (MSDS) prior to the purchase and use of this product. E-mail <a href="mailto:taltech@tal.co.za">taltech@tal.co.za</a> or call 0860 000 825 for a copy of the MSDS.

Use only as directed.

Do not ingest or inhale.

Keep out of reach of children.

Operatives should use barrier creams when handling coatings. Care should be taken not to spill the coating or allow it to come into contact with skin.

Operatives should use the following Personal Protection Equipment:

- Eye protection (goggles)
- Gloves
- Rubber soled safety shoes
- Coveralls
- Safety helmet

Work in well-ventilated areas.

When using electrical equipment such as mixers ensure that they are properly fused and earthed with the correct plug and sockets fitted.

Do not use electrical equipment if it will come into contact with water.

Dispose of this product in accordance with local regulations.

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### 14. AUTHORIZED TECHNICAL SPECIALIST:

Please note that only TAL Authorized Technical Specialists are permitted to change any of the information in this data sheet or to provide written recommendations concerning the use of this product.

## 15. PRODUCT GUARANTEE:

TAL products are manufactured and tested in accordance with TAL procedures, which are maintained in line with Quality Control System Standard ISO 9001:2015, OSHAS 45001:2018 and Environmental Management System ISO 14001:2018. TAL products are guaranteed to be free from manufacturing defects and fit for design purposes. TAL guarantees the technical properties of their materials when used strictly in accordance with their materials and methods specifications for the particular project, and where the prescribed standard of workmanship is followed. However, we have no influence over specific site conditions and therefore, if in doubt, the user must always carry out sufficient tests to satisfy himself/herself that the product is suitable for the intended purpose. In special cases, obtain professional advice.

TAL shall not be liable for the standard of workmanship on site, or for any defects or damage due to external causes or factors beyond the control of TAL including, without limitation, unsound structures or foundations, building movement (cracking, creep, deflection, vibration, etc), design defects, earth tremor or other seismic disturbances, land slip, fire, flood or other immersion, or any products which have been adulterated, contaminated or misused in any way. Debonding due to cohesive failure within the substrate is not classified as product failure. The aforementioned list is not exhaustive.

NOTE: We require timeous notification, in writing, of an alleged defect and the opportunity to assess and investigate the problem to our satisfaction <u>prior</u> to any remedial work whatsoever being carried out